

## The Characteristics, Knowledge, and Attitude of Pregnant Women Regarding Early Breastfeeding Initiation on the Fourth Antenatal Care Visit

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### Abstract

**Background:** Early breastfeeding initiation within one hour after birth can reduce maternal and neonatal mortality. One of the interventions given on the fourth antenatal care (ANC) visit is providing information regarding breastfeeding initiation, however, the implementation is low. Many factors may influence breastfeeding initiation, including knowledge and attitude. The aim of this study was to analyze the relationship among the characteristics, knowledge, and attitude of the pregnant women on the fourth ANC visit regarding early breastfeeding initiation in Jatinangor.

**Methods:** An analytic cross-sectional study was conducted in September 2013. A total of 61 pregnant women registered for the fourth ANC visit (K4) in Jatinangor Public Health Center were involved in this study. Data were collected from questionnaires. Data on the number of gestation, level of education, source of information regarding breastfeeding initiation, knowledge and attitude about early breastfeeding initiation were collected and analyzed using chi-square.

**Results:** There was a significant relationship between a number of gestation, level of education, source of information and knowledge also attitude, as well as between age and attitude ( $p < 0.05$ ). However, there was no significant association between age and knowledge ( $p > 0.05$ ).

**Conclusions:** Number of gestation, level of education, and source of information have a significant relationship with both knowledge and attitudes about early breastfeeding initiation.

**Keywords:** Antenatal care visit, attitude, breastfeeding initiation, knowledge

### Introduction

Early breastfeeding initiation within one hour after birth has a specific role to reduce the infant mortality rate.<sup>1,2</sup> Furthermore, early skin-to-skin contact between mother and infant may give benefit to infant health.<sup>3,4</sup> The World Health Organization (WHO) has recommended the breastfeeding within one hour after childbirth to ensure that the infant receives the colostrums that contain many antibodies to increase the immunity of the newborn.<sup>5</sup>

The implementation of breastfeeding initiation within one hour after giving birth in Indonesia was very low, which is only 29.3%.<sup>6</sup> Implementation of early breastfeeding initiation is influenced by the mother's knowledge and attitude about its benefits

and risk associated with not breastfeeding.<sup>7</sup> Information regarding early breastfeeding initiation has given to pregnant women through the third (K3) and fourth (K4) antenatal care (ANC) visit.<sup>8</sup> However, there is a considerable gap between the coverage of the fourth antenatal care (ANC) visit (K4) with the implementation of early breastfeeding initiation.<sup>6</sup>

Behavior is influenced by knowledge and attitude.<sup>9</sup> It shows that successful breastfeeding was determined by the knowledge and attitude of the pregnant women.<sup>10,11</sup> Knowledge and attitude are influenced by various factors, including age, education, environment, experience, facilities, and socio-cultural.<sup>9,12</sup> The aim of this study was to analyze the relationship among characteristics of a pregnant women during the fourth ANC visit

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(K4) with knowledge and attitudes regarding early breastfeeding initiation

## Methods

An analytical cross-sectional study was conducted in September 2013. The sample data was obtained from the Public Health Center (*Pusat Kesehatan Masyarakat, Puskesmas*) Jatinangor, Sumedang District, West Java. All pregnant women who registered for the fourth antenatal care (ANC) visit (K4) at Puskesmas Jatinangor during September 2013 and had consented to participate by filling the informed consent form were selected to be a participant. From these criteria, 61 pregnant women were participated and selected by consecutive sampling. This study was approved by the Health Research Ethics Committee, Faculty of Medicine Universitas Padjadjaran, with Ethical clearance no. 34/UN6.C2.1.2/KEPK/2013.

Participant's characteristics in this study were age, categorized into age above the median and below the median. The number of gestation was categorized into primigravida (first pregnancy) and multigravida (number of gestation  $\geq 2$ ). Level of education was categorized into high and low. High education including senior high school or college, low education primary high school, junior high school, or did not attend school. Source of information about early breastfeeding initiation was categorized into information from health care service and not from health care service.

This study used primary data. The participants were asked to fill the informed consent form and questionnaire. The

questionnaires were explored about knowledge and attitude about early breastfeeding initiation. The scoring of good knowledge was more than 75, moderate was 50–<75 and low was less than 50. The attitude was categorized positive when the score is  $\geq$  the median and negative attitude when the score < median. The data collected were analyzed through Statistical Product and Service Solutions (SPSS). Bivariate analysis was conducted to assess the relationship of characteristics with knowledge and attitude regarding early breastfeeding initiation. The Chi-square test and Kolmogorov-Smirnov test were used to measure the bivariate relationship of two categorical data. If the p-value < 0.05, it showed that there was a significant relationship between those variables tested.

## Results

The median age in this study was 28. Most of the respondent had age above the median (59%), multigravida (56%), high level of education (62%), and health care service as a source of information regarding early breastfeeding initiation (72%) (Table 1). Most of the respondents received information regarding breastfeeding initiation from primary health care and midwives. A total of 34 respondents (56%) graduate from senior high school.

Most the respondents had a moderate level of knowledge. Most of the respondents who had a good knowledge were within age group above the median, a multiple numbers of gestation ( $G \geq 2$ ), high level of education, and health service as a source of information (Table 2).

**Table 1 Characteristics of Pregnant Women during the Fourth Antenatal Care Visit.**

Variables	Category	Participants (n=61)	
		n	%
Age (years old)	Above the median	36	59
	Below the median	25	41
Number of gestation	Primigravida (G1)	27	44
	Multigravida ( $G \geq 2$ )	34	56
Level of education	High	38	62
	Low	23	38
Source of information	From health care service	44	72
	Not from health care service	17	28

Note: G1= the first gestation;  $G \geq 2$ = the second gestation or more

**Table 2 Relationship between Characteristics of Pregnant Women and Knowledge Regarding Early Breastfeeding Initiation**

Variable	Knowledge			Total (n=61)	p-value
	Good (n=21)	Moderate (n=23)	Low (n=17)		
Age (years old)					
Above the median	16	13	7	36	0.088
Below the median	5	10	10	25	
Number of gestation					
G1	5	10	12	27	0.015*
≥G2	16	13	5	34	
Level of education					
Low	3	9	11	23	0.006*
High	18	14	6	38	
Source of information					
From health care service	20	17	7	44	0.022*
Not from health care service	1	6	10	17	

Note: median of age= 28 years old; G1= the first gestation; G2= the second gestation or more, \*significant  $p<0.05$

Most of the respondents (44 respondents or 72%) had a positive attitude regarding early breastfeeding initiation. All respondent's characteristics had a significant relationship ( $p<0.005$ ) with the attitude of early breastfeeding initiation as shown in Table 3.

## Discussions

Our study result has shown that pregnant women (K4) mostly had good knowledge regarding early breastfeeding initiation, including 34.4% with good knowledge and

**Table 3 Relationship between Characteristics of Pregnant Women and Attitude regarding Early Breastfeeding Initiation**

Variable	Attitude		Total (n=61)	p-value
	Positive (n =44)	Negative (n=17)		
Age (years old)				
Above the median	30	11	36	0.019
Below the median	14	11	25	
Number of gestation				
G1	13	14	27	0.000*
≥G2	31	3	34	
Level of education				
Low	12	11	23	0.007*
High	32	6	38	
Source of information				
From health care service	38	6	44	0.003*
Not from health care service	6	11	17	

Note: median of age= 28 years old; G1= the first gestation; G2= the second gestation or more, \*significant  $p<0.05$

37.7% with a moderate knowledge. One of intervention given in the fourth antenatal care visit (K4) was providing information regarding early breastfeeding.<sup>8</sup> Thus, the knowledge of pregnant women K4 can be obtained from counseling on antenatal care. However, there were 17 subjects (27.8%) who had low knowledge. The results suggest that information regarding early breastfeeding initiation through antenatal care was not optimal, proven by a total of 11 respondents (27.9%) who did not get the information from the health caregiver.

A significant relationship has been found between the number of gestation, level of education, source of information and knowledge regarding early breastfeeding initiation. The relationship between age and knowledge regarding early breastfeeding initiation was not significant.

The number of gestations has a significant association with knowledge. Knowledge is influenced by sensing and intensity of attention.<sup>9</sup> Number of gestation related to childbirth experience. This experience affects knowledge regarding early breastfeeding initiation. A study by Narayan et al.<sup>13</sup> showed that primigravida adversely affects breastfeeding.

Education is one of the factors that affect knowledge. Education is needed to get information. The higher level of education, the easier to receive the information,<sup>12</sup> therefore, the level of education of pregnant women determines knowledge regarding early breastfeeding initiation.

The source of information had a significant association with knowledge regarding early breastfeeding initiation. It was related to the counseling given by health care to pregnant women who visit antenatal care. Some studies discovered that knowledge and awareness related to breastfeeding was better after counseling.<sup>14,15</sup>

The age of the pregnant women did not have a significant relationship with their knowledge. The older person's age, the better able to work and think, the experience was one of the factors.<sup>12</sup> However, older age does not always create better knowledge. Younger mothers are less likely to do breastfeeding initiation compared with older mothers. This is due to the lack of social support and mother misperception about breastfeed.<sup>16</sup> It shows that age does not become an absolute factor that determines the knowledge level of a pregnant women.

Most of the respondents (72.1%) have a

positive attitude regarding early breastfeeding initiation, confirming the theory by Newcomn that attitude is a readiness to take action.<sup>9</sup> That means the subjects mostly ready and agreed to do early breastfeeding initiation.

Based on the analysis of each characteristics with attitude, all of characteristic of pregnant women, that is age, a number of gestation, level of education, and source of information regarding early breastfeeding initiation have a significant association with attitude.<sup>9</sup> Factors that influence attitude is experience, facilities, and socio-cultural. Experience related to age and number of gestation, facility related to promote and support breastfeeding provided by health care service and one of socio-cultural factors is the level of education.<sup>17</sup> Through one of the questions about attitudes on the questionnaire, most of the respondents (92%) agreed to do early breastfeeding initiation after childbirth. The result contradicts the fact that there was the low implementation of early breastfeeding initiation. It may relate to other factors, including health care service factors.<sup>17</sup>

This study had some limitations. Not all the questionnaires were administered directly by the author and the sampling used in this study was consecutive sampling, therefore this study tends to less reflecting the Jatinangor sub-district.

In conclusion, Most of the characteristics of pregnant women have a significant association with knowledge and attitude. Age did not have a significant association with knowledge. The suggestion for health care services is to improve antenatal care service, particularly in providing information regarding early initiation of breastfeeding and further research is needed to follow up on the implementation of early breastfeeding initiation among respondents

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